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| EXAMINER |
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| ART UNIT | PAPER NUMBER |
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2181

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/681,548 | <b>Applicant(s)</b><br>RIGGINS ET AL. |  |
|                              | <b>Examiner</b><br>David E. Martinez | <b>Art Unit</b><br>2181               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,24 and 46-89 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,24,46-62,65-83 and 86-89 is/are rejected.
- 7) ☒ Claim(s) 63,64,84 and 85 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/11/06 has been entered.

### ***Specification***

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Objections***

Claims 55 and 76 are objected to because of the following informalities: They recite the acronyms "TLV" and "CDP" which were not previously written out to show what they stand for. Appropriate correction is required.

Claims 68 and 89 are objected to because of the following informalities: They recite the terms "sysDescr", "sysObjectID" and "MIB" which were not previously written out to show what they stand for. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112-2<sup>nd</sup> paragraph***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 48-58, 60, 62, 67, 68, 70-74, 77-79, 81, 83 and 88-89 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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1. With regards to claim 48, the term "a port role definition" in the last line, renders the claim indefinite since it is not clear if it is a new instance of a port role definition or if it's referring to the port role definition already recited in claim 47.
2. With regards to claim 49, in line 1, the term "a profile" renders the claim indefinite since it's not clear if it's a new instance of a profile or if it's referring to the profile already recited in claim 48. Also, in line 2, the term "one or more ports" is not clear since it's not understood if it's a new instance of one or more ports, nor if the term is referring to already recited port(s) of the apparatus or of the network element. In addition in line 2, the term "the profile", is it referring to the "a profile" instance of claim 49 line 1 or to the instance recited in claim 48 line 6?
3. With regards to claim 50, the term "a port role definition" in line 1 renders the claim indefinite since it is not clear if it is a new instance of a port role definition or if it's referring to the port role definition already recited in claim 48 or claim 47. Also, the term "a port" in line 3 renders the claim indefinite since it's not clear if it's a new instance of a port for an element, or if it's referring to a port already recited in claim 47. Furthermore in the same line 3, the term "the port role definition", is it referring to a new instance of a port role definition in claim 48 or to a distinct instance in claim 47?
4. With regards to claims 51-53, in line 1 of each of those claims, is the term "wherein the configuration values" referring to the term "one or more configuration values" recited in claim 50 or is the term trying to call of the option or having at least two configuration values? Perhaps the claims should incorporate the "...one or more..." term to read "wherein the one or more configuration values". The current term used in line 1 of claims 51-53 appear to bring a lack of antecedent basis as they stand since they don't take into account the possibility of the apparatus requiring a single configuration value.

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5. With further regards to claims 51 and 52, in lines 2-3 of each of the claims, the term “the port that is associated with the port role definition” is not clear since it’s not understood if it’s referring to the port recited in claim 50, or the one in claim 48 or the one in claim 47.

Furthermore, the term “the configuration values comprise one or more configuration attributes and value pairs...”, is the term supposed to be interpreted as comprising one configuration attribute or (in the alternative) value pairs, or is the value pair a requirement and the “one or more” only applies to the configuration attributes and not to the value pairs?

6. With further regards to claim 53, the term “the configuration values comprise one or more lines of the configuration language of the apparatus” is indefinite. It isn’t clear how configuration values comprise lines of the configuration language of the apparatus. Is the configuration language some kind of programming language? There appears to be a lack of antecedent basis for this “the configuration language”. The term is being interpreted as meaning to say “the one or more configuration values comprise one or more lines of code implemented by the apparatus”?

7. With regards to claim 54, the term “a port” is not clear since it’s not understood if it’s a new instance of a port of the apparatus or if it’s supposed to be referring to the port previously recited in claim 47.

8. With regards to claims 55 and 76, the terms “the capability TLV or platform TLV” and “the sysName TLV” appear to lack antecedent basis.

9. With regards to claim 56, the term “configuration settings” in line 5 render the claim indefinite. It’s not clear if it’s a new instance of configuration settings or if it is supposed to be referring to the configuration settings already recited in claim 47.

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10. With regards to claim 57, the term "wherein the additional configuration settings" is not clear since it's not understood if it refers to the configuration settings of claim 56 or of claim 47, or if all three are supposed to be the same configuration settings.

11. With regards to claim 58, the term "a port" is not clear since it's not understood if it's a new instance of a port or if it's supposed to be referring to one of the ports previously recited in claim 47. Also, is "a plurality of ports" a new instance of ports or is it referring to the ones in claim 47?

12. With regards to claim 60, the term "a particular port" suffers from the same deficiencies as claim 58 above and thus is rejected under the same rationale.

With regards to claim 62, it contains the trademark/trade name "Cisco". Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a corporation and, accordingly, the identification/description is indefinite.

13. With regards to claim 67, the term "the step of discovering is performed by a protocol..." renders the claim indefinite. A protocol per se cannot perform a step. A protocol is implemented. Some element in the claim has to implement a protocol. The examiner reads the claim as "wherein the step of discovering is performed by the processor which implements a protocol selected from...".

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14. With regards to claim 68, the same argument directed to a protocol in claim 67 applies to the term "...is performed by Simple Network Management Protocol..." and is being read as "...is performed by a processor implementing Simple Network Management Protocol...". Also, the last line of the claim recited "a port". Is that a new instance of a port or is it one of the ports from claim 47?

With further regards to claims 67 and 88, they contain the trademark/trade name "Cisco". Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a corporation and, accordingly, the identification/description is indefinite.

15. With regards to claim 70, it suffers from the same deficiencies as claim 49 above and thus is rejected under the same rationale.

16. With regards to claim 71, it suffers from the same deficiencies as claim 50 above and thus is rejected under the same rationale.

17. With regards to claim 72, it suffers from the same deficiencies as claim 51 above and thus is rejected under the same rationale.

18. With regards to claim 73, it suffers from the same deficiencies as claim 52 above and thus is rejected under the same rationale.

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19. With regards to claim 74, it suffers from the same deficiencies as claim 53 above and thus is rejected under the same rationale.

20. With regards to claim 77, it suffers from the same deficiencies as claim 56 above and thus is rejected under the same rationale.

21. With regards to claim 78, it suffers from the same deficiencies as claim 57 above and thus is rejected under the same rationale.

22. With regards to claim 79, it suffers from the same deficiencies as claim 58 above and thus is rejected under the same rationale.

23. With regards to claim 81, it suffers from the same deficiencies as claim 60 above and thus is rejected under the same rationale.

24. With regards to claim 83, it suffers from the same deficiencies as claim 62 above and thus is rejected under the same rationale.

25. With regards to claim 88, it suffers from the same deficiencies as claim 67 above and thus is rejected under the same rationale.

26. With regards to claim 89, it suffers from the same deficiencies as claim 68 above and thus is rejected under the same rationale.

Due to the vagueness and a lack of clear definiteness in the claims, the claims have been treated on their merits as best understood by the examiner.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1, 24, 46-54, 56-60, 65-66, 69-75, 77-81 and 86-87 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 6,175,882 to Bunton et al.(hereinafter Bunton).

27. With regards to claims 1, 24, 46 and 47, Bunton teaches a method comprising the steps of:

discovering information that identifies or describes a device type of a second network element that is coupled to a port of a first network element [column 2 lines 38-47];

associating the port of the first network element with a port role definition selected from a plurality of port role definitions based on the discovered information [column 2 lines 6-25];

retrieving one or more configuration settings that are associated with the selected port role definition [column 2 lines 6-25, and lines 38-47]; and

applying the one or more configuration settings to the port of the first network element [column 2 lines 6-25 and lines 38-47].

28. With regards to claim 46, Bunton teaches an apparatus having means to implement the steps of claim 1 above (fig 1 elements 100 and 102)

29. With further regards to claims 47, Bunton teaches and apparatus [fig 1 element 100] comprising:

a network interface [fig 1 element 100 having bus lines connected to element 102] that is coupled to a data network for receiving one or more packet flows therefrom [fig 1 element 102];

a processor [fig 1 element 100 – column 2 lines 25-44];

one or more stored sequences of instruction which when executed by the processor cause the processor to carry out the steps of claim 1 above [see claim 1 rejection].

30. With regards to claims 48 and 69, Bunton teaches wherein the associating a port with a port role definition comprises of:

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mapping the port to a profile selected from a plurality of profiles based on the discovered information [column 2 lines 6-25, and lines 38-47 and lines 62-64 and column 3 lines 5-15 – The SNet-I mode has one profile and the Snet-II mode has three profiles]; and

matching the profile to a port role definition [column 2 lines 62-64 and column 3 lines 5-14].

31. With regards to claims 49 and 70, Bunton teaches, wherein a profile comprises a profile identifier [column 2 lines 63-64, RxClk0 and RxCd[9] toggle to identify the right profile used for the SNet-II mode], and one or more rules that maps one or more ports to the profile based on the discovered information [column 3 lines 5-15].

32. With regards to claims 50 and 71, Bunton teaches, wherein a port role definition comprises a port role definition identifier, and one or more configuration values that can be applied to a port that is associated with the port role definition [column 2 lines 63-64, RxClk1 is an identifier that determined which profile (mode) to use].

33. With regards to claims 51 and 72, Bunton teaches, wherein the configuration values comprise one or more configuration attributes and value pairs for the port that is associated with the port role definition [column 3 lines 5-30].

34. With regards to claims 52 and 73, Bunton teaches, wherein the configuration values comprise one or more quality of service values for the port that is associated with the port role definition [column 3 lines 5-30].

35. With regards to claims 53 and 74, Bunton teaches, wherein the configuration values comprise one or more lines of the configuration language of the apparatus [column 3 lines 5-30 – configuration changes (values) are implemented by the hardware using instructions(a configuration language)].

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36. With regards to claims 54 and 75, Bunton teaches, wherein the discovered information comprises a type identifier of the network element that is coupled to a port of the apparatus [column 3 lines 5-30]; and an identity identifier of the network element [column 2 lines 6-25, MAC of the network element].

37. With regards to claims 56 and 77, Bunton teaches, the apparatus storing instructions that cause the processor to carry out the steps of:

providing the discovered information to a management application [column 3 lines 5-30, the sensing of the data (information) is provided to a configuration setting element];

receiving zero [when receiving zero, then not necessarily receiving anything and thus not required to do anything] or more configuration settings from the management application.

applying the configuration settings to the port of the apparatus [when receiving zero above, not required to apply anything].

38. With regards to claims 57 and 78, Bunton teaches, wherein the additional configuration settings are generated based on the discovered information [column 3 lines 5-30].

39. With regards to claims 58 and 79, Bunton teaches, wherein the apparatus is programmed to automatically configure a selection of one or more ports from a plurality of ports [column 2 lines 25-37].

40. With regards to claims 59 and 80, Bunton teaches, wherein the steps are performed when the apparatus boots up [column 2 lines 25-37].

41. With regards to claims 60 and 81, Bunton teaches, wherein the steps are performed for a particular port of the apparatus when said port becomes active after a period of inactivity [column 2 lines 25-37].

42. With regards to claims 65 and 86, Bunton teaches, wherein the apparatus [fig 1 element 100] is a switch or router [column 2 lines 25-37].

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43. With regards to claims 66 and 87, Bunton teaches the network element that is coupled to a port of the apparatus is a personal computer, phone, router, server, or storage device [note the use of alternative language – column 2 lines 6-25 show the serdes component interfaces to a standard 100BaseX cabling thus it's a part of a computer or a phone, or a router, or a server, or a storage device].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 61, 67, 82 and 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,175,882 to Bunton et al.(hereinafter Bunton). In view of US Patent Application Publication No. US 2003/0169761 A1 to Duncan et al. (hereinafter Duncan).

44. With regards to claims 61 and 82, Bunton is silent as to wherein the steps are performed at a specified periodic time interval. However, Duncan teaches performing steps at a specified periodic time interval for the benefit of periodically monitoring for new devices and device failures [paragraphs 6 and 8].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Bunton and Duncan to have the steps be performed at a specified periodic time interval for the benefit of periodically monitoring for new devices and device failures.

45. With regards to claims 67 and 88, Bunton is silent as to wherein the step of discovering is performed by a protocol selected from the set consisting of Cisco Discovery Protocol, Network-Based Application Recognition, 802.1x, and Simple Network Management Protocol

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[note alternative language]. However, Duncan teaches polling requests to devices (for discovering devices) using the Simple Network Management Protocol for the benefit of using a standard for system compatibility.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Bunton and Duncan have the step of discovering be performed using the Simple Network Management Protocol for the benefit of using a standard for system compatibility.

#### ***Allowable Subject Matter***

Claims 63-64 and 84-85 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

With regards to claims 63 and 84, the prior art of record along or in combination fail to teach or fairly suggest wherein the profile further comprises a counter indicating a number of ports to which the profile is currently mapped, combined with the elements of the their parent claims.

With regards to claims 64 and 85, the prior art of record along or in combination fail to teach or fairly suggest wherein the profile further comprises a counter indicating a number of ports to which the profile is currently mapped and wherein the steps of retrieving and applying are performed only when the counter is less than or equal to zero, combined with the elements of their parent claims.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 24, 46-89 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 6,026,078 to Smith teaches a network port having multiple configurations. The multiple configurations permit a single network port to operate in different modes.

The references below are also directed to port configuration assignment in a device:

US Patent No. 6,611,518 to Ngo et al.

US Patent No. 5,561,666 to Christensen et al.

US Patent No. 5,687,174 to Edem et al.

US Patent No. 5,680,397 to Christensen et al.

US Patent No. 5,574,722 to Slykhouse et al.

US Patent No. 5,568,525 to de Nijs et al.

US Patent Application Publication No. US 2004/0081196 A1 to Elliott

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Martinez whose telephone number is (571) 272-4152. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fritz M. Fleming can be reached on 571-272-4145. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DEM



**KIM HUYNH**  
**SUPERVISORY PATENT EXAMINER**  
10/13/06